



Cal/EPA

California
Environmental
Protection
Agency



Air Resources Board

P.O. Box 2815
2020 L Street
Sacramento, CA
95812-2815
<http://www.arb.ca.gov>

October 31, 1997



Pete Wilson
Governor

*Secretary for
Environmental
Protection*

Jon Young
President
Hasstech, Incorporated
6985 Flanders Dr.
San Diego, CA 92121

#97-11

Dear Mr. Young:

**Certification of the OPW Model 11VAI-37 Vapor Recovery Nozzle
With the Hasstech VCP-3A System**

Your requested California Air Resources Board (CARB) certification of the OPW Model 11-VAI-37 Phase II Vacuum assist nozzle for use with the Hasstech VCP-3A Vapor Recovery System. This nozzle was requested for specific use with "high hang" dispensers.

The OPW Model 11-VAI-37 vacuum assist nozzle is similar in design to the OPW Model 11-VAI-27 vacuum assist nozzle with the exception that a 1/8" diameter "slurpee tube" has been added. The slurpee tube is attached to a brass tube fitting that has been press fit through the main nozzle body and terminates in the air circuit at the venturi. The slurpee tubing runs through the vapor path out the butt end of the nozzle. During installation of the nozzle onto an inverted coaxial hose, the slurpee tubing is fed into the vapor return hose. During fueling, the flow of liquid passed the end of the brass tube creates a venturi affect which provides the necessary vacuum to clear any liquid that may accumulate in the vapor return hose due to top-offs.

As required by the certification Procedures for Gasoline Vapor Recovery Systems at Service Stations, the approvals of the three State agencies is a precondition to certification by the Air Resources Board. The appropriate letters of approval have been received and are listed as follows:

- Department of Food and Agriculture,
Division of Measurement Standards
Certification # 3893(e), issued September 26, 1997
- Department of Occupational Safety and Health
October 9, 1997
- Department of Forestry and Fire Protection
Office of the State Fire Marshal
Certification # 005:008:050, revised September 29, 1997.

The OPW Model 11-VAI-37 nozzle has successfully completed operational testing, liquid evacuation testing and a 100-Car efficiency test on the Hasstech VCP-3A Phase II Vapor Recovery System utilizing “high hang” dispensers.

I find that the use of the OPW Model 11-VAI-37 vacuum assist nozzle will not adversely affect the performance of the Hasstech VCP-3A vacuum assist vapor recovery systems utilizing “high hang” dispensers on which they are installed. The OPW Model 11VAI-37 nozzle is also the only nozzle that can effectively evacuate liquid accumulation in the vapor return hose on the “high hang” dispenser configuration of the Hasstech VCP-3A vacuum assist vapor recovery system. Therefore, the Hasstech VCP-3A vacuum assist vapor recovery systems incorporating “high hang” dispensers are conditionally certified for use only with the OPW Model 11-VAI-37 vacuum assist nozzle.

If you have any questions or wish to discuss this, please call Paul Thalken at (916) 445-0383 or Laura McKinney at (916) 327-1525.

Sincerely,

INTERNET VERSION

James Morgester, Chief
Compliance Division

cc:

Mr. Jim Johnston, Chairman,
CAPCOA Vapor Recovery Committee
Monterey Bay Unified APCD
24580 Silver Cloud Ct.
Monterey, CA 93940

Mr. Gary Hunter, Manager,
CARB Compliance Assistance Section